

**ANALYTICAL CHEMISTRY LABORATORY
TECHNICAL TALK HISTORY**

TITLE	SPEAKER
<i>29th Technical Talk – May 12, 1998</i>	
Analysis of Lithium Aluminate for Tritium Production	A. Essling
Study of Effect of Spectral Resolution on Pattern Recognition Using Passive Fourier Transform Infrared Sensor Data	A. Bangalore
Comparison of Infrared and Mass Spectroscopy as Methods of Continuous Emission Monitoring	C. Snyder
Evaluation of FT-Raman Spectroscopy for Determination of Semivolatile Organic Compounds in WIPP Sludge Samples	A. Boparai
<i>28th Technical Talk – November 6, 1997</i>	
Computer Program Assisted Spectral Interference Corrections for Interference Prone Elements in Plasma Source Mass Spectrometry	K. Parish
Mobil Lab Screening of VOC's in Soil Using Static Headspace	D. Applegate
Performance Characterization of a New ICP/AES System	D. Huff
<i>27th Technical Talk – April 22, 1997</i>	
Determination of Volatile and Semivolatile Organic Compounds in WIPP Sludges	A. Boparai
Analytical Chemistry of Aluminum Saltcake	D. Graczyk
Analysis of Lead Cable Experiment Samples using X-ray Diffraction, Scanning Electron Microscope/Energy Dispersive Spectrometry, Inductively Plasma/Atomic Emission Spectrometry, Gas Mass Spectrometry, and Gas Chromatography/Mass Spectrometry for Engineering Systems, Inc.	P. Johnson
<i>26th Technical Talk – November 7, 1996</i>	
Determination of Water-Soluble Volatile Organic Compounds in WIPP Sludges	D. Applegate
Nuclear Smuggling Exercise	D. Bowers
Determination of Labile Transition Metal Cations in Industrial Waste Water	J. Crain
Gamma Spectroscopy Using Gamma Vision	T. TenKate

TITLE	SPEAKER
<i>25th Technical Talk – April 25, 1996</i>	
Flow Injection-Direct Injection Nebulization (FI-DIN) for High Efficiency Sample Introduction and Waste Minimization in Inductively Coupled-Plasma-Mass Spectrometry	J. Kiely
Post-Test Analysis of Batteries	J. Marr
Surface Enhanced Infrared Absorbance (SEIRA)	G. Reedy
<i>24th Technical Talk – December 7, 1995</i>	
Radon Remediation	F. Markun
FTIR Sample Analysis: Microscopic and Macroscopic Techniques	S. Kent
Chromatographic Optimization of GC/MS Analysis of Semivolatile Organic Pollutants	Y. Tsai
Arsenic Speciation Using HPLC-ICP-MS	D. Bass
<i>23rd Technical Talk – June 29, 1995</i>	
Cocaine Contamination and Transfer Between Money and People	J. Demirgian
Microwave-Assisted Extraction of Semivolatile Organic Pollutants from Soil	J. Schilling
Development, Preparation, and Verification of the First Cycle of the WIPP Solidified TRU Waste Performance Demonstration Samples	K. Parish
<i>22nd Technical Talk – April 20, 1995</i>	
Determination of Naturally-Occurring Actinides and Their Progeny in Fresh Water Using ICP-MS and Batch Separation	J. Crain
Waste Oil Preparation for Analysis to Determine Hazardous Metals	A. Essling
<i>21st Technical Talk – November 10, 1994</i>	
Comparison of Gamma Spectrometric Self-Absorption Models for Environmental Samples	E. Streets
Gross Alpha/Beta Analysis of Environmental and Mixed Waste Samples by High-Pressure Microwave Dissolution	J. Yaeger
Development of Chemometrics-Based Algorithms for Real-Time Analysis of Chemical Sensor Data: An Overview of the SAGE Program	S. Carpenter

TITLE	SPEAKER
20th Technical Talk – February 22, 1994	
Environmental Radioanalytical Method Development: What's New	L. Smith
New Isotopic Perspectives on Atmospheric Carbon Monoxide	C. Stevens
PCB Determination in Rocky Flats Plant Mixed Waste Sludges	K. Parish
Proposed Scoring Protocols for the Integrated Performance Evaluation Program (IPEP)	E. Streets
19th Technical Talk – November 9, 1993	
Biology's Animal Orphan Waste	F. Markun
Characterization of Organic Compounds in Coal Ashes	E. Hwang
A Comparison of Extraction Soils Using the Toxicity Characteristic Leaching Procedure and Total Metal Digestion	D. Bass
TRU•Spec and RE•Spec Chromatography: Basic Studies and Applications	E. Huff
18th Technical Talk – February 25, 1993	
Analysis of Paint Samples—A Comparative Study Using FTIR Microscopy and SEM-EDX	C. Snyder
Implementation of Thermal Desorption Fourier-Transform Infrared Spectroscopy in Direct Analysis of Soil Samples for Semivolatile and Volatile Organics	M. Clapper-Gowdy J. Demirgian J. Tang
Particle Beam Liquid Chromatography/Mass Spectrometry	S. Kent
17th Technical Talk – November 5, 1992	
Volatile Organic Analysis of Mixed Waste Samples	L. Chromizky
Radiochemical Analysis of the EBWR Reactor Vessel Wall	D. Bowers
Rietveld Refinement of X-ray Powder Diffraction Data	P. Johnson
Special Considerations in the Analysis of Mixed Waste Samples	E. Hwang
The Stability of Calibration Standards for ICP/AES Analysis	E. Huff D. Huff
Stability of Low Concentration Calibration Standards for Graphite Furnace Atomic Absorption	L. TenKate
Volatile Analysis of Mixed Waste Samples	L. Chromizky

TITLE	SPEAKER
<i>16th Technical Talk – February 25, 1992</i>	
Computer Generation of EPA CLP Reporting Forms for Organic Analysis	L. Lamoureux
Development of an Interlaboratory Performance Evaluation Program (IPEP) for the Department of Energy's Environmental Restoration and Waste Mangement Programs	E. Streets
The Stability of Calibration Standards for ICP/AES Analysis	D. Huff
<i>15th Technical Talk – November 5, 1991</i>	
Determination of TRUs and Sr in Soil by Elution Chromatography	L. Smith
Development of an FTIR Method to Measure Explosives and Selected Contaminants by Thermal Desorption FTIR	M. Clapper-Gowdy
Quality Assurance for Headspace Gas Analysis in the WIPP Experimental Waste Characterization Program	D. Bass
Quantitation of Volatile Organic Compounds in the Headspace Over Transuranic Waste by Gas Chromatography/Mass Spectrometry	D. Applegate
<i>14th Technical Talk – April 9, 1991</i>	
Analysis of Potential Contamination by Fog Oil in Soils and Plants	C. Snyder
In Search of a Universal Matrix Modifier	L. TenKate
<i>13th Technical Talk – December 6, 1990</i>	
Analysis of Canister Air Samples Involving Cryogenic Trapping Prior to GC/MS	D. Applegate
Computerized Calculation of Environmental Levels of Radioactivity Determined by Gamma Spectrometry	W. Streets
New Method for Isolating Strontium	A. Essling
<i>12th Technical Talk – March 22, 1990</i>	
Characterization and Calibration of a Daly Scintillation Detector for Thermal Ionization Mass Spectrometry of Uranium	D. Graczyk
Determination of Protactinium-231 for the Lansdowne Project	L. Wetter
Qualitative and Quantitative Analysis of Target Analytes Using Remote Detection FTIR	J. Demirgian

TITLE	SPEAKER
<i>11th Technical Talk – November 9, 1989</i>	
Analysis of Activation Products in the Neutron Shield Tank of the Shippingport Reactor	D. Bowers
Analysis of Inorganic Analysis Data Quality	P. Lindahl
Determination of Organic Fluid Fouling	C. Snyder
<i>10th Technical Talk – April 18, 1989</i>	
Analyses for Argonne Premium Coal Sample Program	A. Engelkemeir
Development of Computer-Generated Data Packages for EPA Analyses	J. Demirgian
Quantitation with GC/MI-IR	S. Spiro
Radium in Drinking Water	F. Markun
<i>9th Technical Talk – November 1, 1988</i>	
Determination of Low-Level Radioactivity in Environmental Samples by Gamma Spectroscopy at Argonne National Laboratory	E. Streets R. Heinrich L. Lamoureux
Determination of Refractory Actinides in Environmental Samples: Is Total Dissolution Necessary?	L. Wetter E. Markun T. TenKate
Isolation and Purification of Uranium from Environmental Materials for Mass Spectrometric Analysis	A. Essling D. Graczyk E. Horwitz
<i>8th Technical Talk – January 9, 1988</i>	
Are Cleanup Steps Really Needed in Dioxin Analysis?	R. Wingender
Development of a Methodology for the FTIR Analysis of Stack Gas	J. Demirgian
Ion Chromatographic Analysis of Marble and Limestone Surfaces Exposed to the Acidic Outdoor Environment	F. Smith
Measurement of Long-Lived Isotopes	D. Bowers

TITLE	SPEAKER
7th Technical Talk – December 9, 1986	
Analytical Support of Pyrometallurgical Processes at ANL	D. Bowers
Applications of Lasers in Analytical Chemistry – Photoacoustic Spectroscopy in Raman Microanalysis	M. Doxtader
Data Transmission Between Analytical Instrumentation, Lab Computer, and Mainframe – A Method to Improve the Efficiency of Data Mangement	J. Demirgian
GC/MI/IR Applications: Analysis of Fossil Fuels	J. Schneider
Separation of Actinide Elements by Column Extraction Chromatography Prior to ICP/AES Analysis	E. Huff
6th Technical Talk – April 10, 1986	
Applications of GC/FTIR to Environmental and Degradation Studies	J. Demirgian
High-Level Tritium Extraction System	D. Bowers
Intralaboratory Comparison of Major and Minor Elements in Coal Ash by ICP-AES and AA	I. Fox
Liquid and Supercritical Fluid Chromatographic Mobile Phases as Potential Matrices in Matrix-Isolation Infrared Spectrometry	A. Boparai
5th Technical Talk – October 30, 1985	
The Characterization of Selected Nuclear Fuel Cycle Materials by ICP-AES	E. Huff
Chemical Characterization of Polyethylene Resins and Polyethylene Gas Pipe	L. Raphaelian
Electrically Heated Quartz Cell and Holder for an Atomic Absorption Hydride Generation System	P. Lindahl
Matrix Isolation Versus the Light Pipe as an Interface for GC/FTIR	J. Schneider
Uranium and Plutonium Determinations for Evaluation of High Burnup Fuel Performance	R. Heinrich
4th Technical Talk – March 14, 1985	
Development and Application of GC/FTIR/MS Capability	J. Demirgian
Dissolution Technique Using Sealed Glass Tubes at Elevated Temperatures	K. Jensen

TITLE	SPEAKER
Environmental Analysis by GC/MI/FTIR	J. Schneider
Migration of Elements in the Sub-Sea Bed Sediments	C. Sabau
<i>3rd Technical Talk – October 23, 1984</i>	
Determination of Metals in Organic Matrices	E. Huff
GC/Matrix Isolation/FTIR Applications: Analysis of PCBs	J. Schneider
Luminescence of Absorbed Molecules	D. Ettinger
Preparation and Analysis of Iron Isotopic Standards	E. Callis
<i>2nd Technical Talk – May 23, 1984</i>	
Analytical Work for Polyethylene Pipe Project	L. Raphaelian
IDA-80	E. Callis
Remote Instrumentation Laboratory Initiative	D. Ettinger
POP Topics	D. Graczyk
<i>1st Technical Talk – January 18, 1984</i>	
Analysis for Dioxins	R. Wingender
Analysis for PCBs	J. Schneider
Analytical Applications of Ion Chromatography	F. Williams
Analytical Measurements of Actinide Migration in a Laboratory-Simulated Balsealt HLW Repository	D. Bowers
DTA Measurements of U-Si and U-Si-Al Fuel Alloys	M. Homa
ICP/AES in Support of Nuclear Waste Mangement	E. Huff